IN THE CLAIMS

Please amend the claims as follows:

1-24. (Canceled)

25. (Currently Amended) A method for depositing ~~titania, or titania-containing as~~ a thin ~~films~~ film on a substrate, the method comprising:

heating the substrate at a temperature below 250°C;

introducing a pre-vaporized reactive titania CVD precursor into a gas flow flowing through a coating region; and

applying energy to generate ~~using~~ an atmospheric pressure glow discharge plasma in the coating region and using the atmospheric pressure glow discharge plasma as a major source of reaction to deposit the thin film on the substrate ~~improve film properties and film growth rates, when the substrate is~~ heated at [[a]] the temperature below 250°C~~,~~

~~introducing a reactive titania CVD precursor which has been pre-vaporised into the introduced gas flow into a gas flowing through a coating region~~.

26. (Currently Amended) A method according to claim 25, ~~wherein~~ further comprising performing a post treatment ~~of the coating with~~ on the thin film using an atmospheric glow discharge plasma ~~modifies the film~~ to modify properties and structure of the thin film.

27. (Currently Amended) A method according to claim 26, wherein the ~~glow discharge~~ post treatment modifies ~~the film~~ stoichiometry of the thin film allowing control of film properties.

28. (Currently Amended) A method according to claim ~~29~~ 25, wherein the gas flow

flowing into and through the coating region is a laminar flow ~~is introduced into and through the coating region~~.

29. (Currently Amended) A method according to claim 25, ~~wherein~~ further comprising providing an extraction system ~~is employed~~ to control gas flow through the coating region which supports controlled flow.

30. (Currently Amended) A method according to claim 25, ~~wherein~~ further comprising providing a thermal control system ~~is designed into~~ in the coating region to maintain the substrate temperature at a desired level, wherein said thermal control system ~~achieved by a~~ utilizes gas coolant, ~~or~~ water coolant, ~~or~~ liquid coolant ~~based cooling~~, or combinations thereof.

31. (Previously Presented) A method according to claim 30, wherein the thermal control system is configured to cool the coating region to reduce unwanted side reactions.

32. (Currently Amended) A method according to claim ~~29~~ 25, wherein the reactive titania CVD precursor which is introduced in the coating region is an alkoxide of titanium or titanium tetrachloride.

33. (Currently Amended) A method according to claim ~~29~~ 25, wherein ~~films can be~~ the thin film is deposited with a uniformity of at least ~~+/- 20% and preferably a uniformity of at least +/- 10% and more preferably better than~~ +/-5%.

34. (Currently Amended) A method for depositing a thick film or layers of different composition on a substrate using the method according to claim 25~~, used to build up a thicker layer or layers of different composition~~ by arranging sequential coating regions along a direction of movement of the substrate.

35. (Currently Amended) A method of coating a substrate using the method according to claim 25~~, used~~ in combination with a different ~~coating~~ depositing method.

36. (Currently Amended) A method according to claim 25, wherein the glow discharge plasma is generated, between electrodes, by a low frequency source in which the frequency is ~~below 100 KHz and preferably~~ below 30 ~~Khz~~ KHz.

37. (Currently Amended) A method according to claim 36, wherein the ~~metal~~ electrodes are selected from a material that reduces heat generation.

38. (Previously Presented) A method according to claim 36, wherein the electrodes are made of brass.

39. (Currently Amended) A method according to claim 25, wherein power density of the plasma is ~~below 5 Wcm^{-2} and preferably below 1 Wcm^{-2} and more preferably~~ below 0.5 Wcm^{-2}.

40. (Currently Amended) A method according to claim 25, wherein a peak growth rate of the thin film on the substrate is ~~at least 10 nm per second, and up to several tens of nm per second,~~ over 100 nm per second.

41. (Currently Amended) A method according to claim 25, wherein the thin film ~~can be~~ is deposited on preformed and/or thermally toughened substrates.

42. (Currently Amended) A method according to claim 25, wherein the thin film ~~can be~~ is deposited on temperature sensitive substrates including thermally preformed substrates and plastic substrate materials.

43. (Currently Amended) A method according to claim 25, wherein a level of water and oxygen are controlled to achieve target growth rates and to control unwanted side

reactions, the oxygen level being ~~below 5% and more preferably~~ below 1%, the water vapour levels being controlled ~~preferably below 1% and more preferably~~ below 0.1%.

44. (Currently Amended) A method according to claim 43, wherein the substrate upon which the thin film is deposited on is a ~~suitable for coating~~ moving ~~substrates~~ substrate of a continuous film or sheet, or a series of substrates supplied semi-continuously.

45. (Currently Amended) A method according to claim 25, ~~wherein~~ further comprising providing one or more gas flushing zones ~~is used~~ to allow introduction[[,]] and removal[[,]] of the ~~substrates~~ substrate from the coating region while maintaining integrity of the ~~coating region~~ gas composition in the coating region.

46. (Withdrawn -- Currently Amended) A substrate obtained by a method according to claim 25, wherein the thin film is photo-active, demonstrated by its ability to destroy organic materials on ~~the~~ a surface thereof and/or to modify surface energy on irradiation with UV or visible light.

47. (Withdrawn -- Currently Amended) A substrate according to claim 46, wherein the thin film has a degree of crystallinity.

48. (Withdrawn -- Currently Amended) A substrate according to claim 46, wherein the ~~deposited~~ thin film has an optical quality suitable for use on substrates required to be substantially transparent to the human eye and to be looked through.